App. No. 09/576,188
Office Action Dated April 6, 2005

REMARKS

Favorable reconsideration of this application is requested in view of the above amendments and the following remarks. Claim 6 is hereby amended.

The amendment of claim 6, reciting "a pair of correction coils...provided at both sides of said electron gun in said deflection yoke and formed of cores with flat tip ends facing each other and conductive wires wound around the respective cores, the flat tip ends forming therebetween a magnetic field in the direction opposite to the vertical defection magnetic field", is supported by page 7, lines 13-14 and Figure 6(c).

Claim 6 was rejected as being anticipated by Yokota (US 5,260,627). Applicants traverse this rejection. Yokota does not disclose a color picture tube apparatus including a pair of correction coils including an inner pincushion distortion correction coil formed of cores with flat tip ends forming therebetween a magnetic field, as required by claim 6. The Examiner contends that sub-coils 74a and 74b, shown in Figure 10 of Yokota, form the claimed magnetic field. However, Yokota discloses in column 14, lines 53-56 that "the correction B obtained by the barrel magnetic field generated by the second sub coils 74a and 74b wound on the pair of rod-like cores is also applied to the electron beams". Further, Figure 10 of the reference shows sub coils 74a and 74b comprising pointed tips, rather than the flat tips, as required by claim 6.

The invention of claim 6 is intended to correct the "inner pincushion distortion correction", however the invention of Yokota is intended to correct a coma error caused by a difference between deflection sensitivities of a center beam (green) and side beams (blue and red). The reference teaches that in order to correct the coma error, different magnetic fields should be applied to a center beam than to the side beams (see column 3, lines 23-40 and Abstract). The reference teaches a barrel magnetic field, rather than the claimed magnetic field that is applied to each of the three beams for correcting the inner pincushion distortion. See Figure 6(c) of the current invention that shows the claimed inner pincushion distortion correction. The pair of flat tipped correction coils does not operate during vertical deflection in a middle portion of a screen, but does operate during vertical deflection in a peripheral portion.

Thereby an upper and lower pincushion distortion is increased in the peripheral portions of the screen, and an upper and lower pincushion distortion in the middle portion is decreased relatively compared with that in the peripheral portions. By adjusting distortion correction to correct an upper and lower pincushion distortion, an upper and lower inner pincushion distortion is corrected.

Since Yokota does not disclose the claimed flat tipped correction coils that provide inner pincushion distortion correction, the reference cannot anticipate the current invention. Favorable reconsideration of claim 6 is requested.

Claims 6 and 7 were rejected as being anticipated by Ogura (US 5,936,363). Applicants traverse this rejection. Ogura does not disclose a color picture tube apparatus including a pair of correction coils having an inner pincushion distortion correction coil, as required by claim 6. Therefore, Ogura does not suggest the claimed apparatus. The reference is intended to teach correction of a different problem. The invention of Ogura teaches an apparatus for correcting horizontal direction pincushion and barrel distortions of a scanning line that occur at upper and lower portions of a picture screen (see column 1, lines 52-54). The circuit taught by Ogura does not include a diode coil series circuit and a resistor that are connected in parallel to form an inner pincushion distortion correction circuit, as required by claim 6. Therefore, the circuit of Ogura could not provide the same functional result as the claimed circuit that operates the pair of correction coils only during vertical deflection in the peripheral portion of the screen, as shown in Figure 6(c) of the current application. Therefore, Ogura does not anticipate the current invention. Favorable reconsideration of claims 6 and 7 is requested.

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In view of the above, favorable reconsideration in the form of a notice of allowance is requested. Any questions regarding this communication can be directed to the undersigned attorney, Douglas P. Mueller, Reg. No. 30,300, at (612)455-3804.

Respectfully Submitted,

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